PATENT Attorney Docket No. BBC-077A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF	:	EXAMINER: Shiao, Rei Tsang
Barbara Scott et al.	:	ART UNIT: 1626

APPLICATION NO.: 09/777,554 :

FILED: February 6, 2001

FOR: Benzothiazole Derivatives

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

I hereby certify under 37 CFR 1.8 that this correspondence is being facsimile transmitted to the United States Patent and Tracemark Office. facsimile number 571-273-0707 on the date indicated below.

Date of Deposity May 4, 2005

Lisa Rasmussen

INFORMATION DISCLOSURE STATEMENT

Pursuant to our conversation this morning, attached is a copy of the PTO-1449 forms submitted to the USPTO in the instant case on January 12, 2001. It appears that this Information Disclosure Statement was not considered. I will send these forms and the listed references by Express Mail.

Respectfully submitted,

Jayle O'Prien

Date: May 4 2006

Gayle O'Brien
Agent for Applicants
Reg. No. 48,812

Abbott Bioresearch Center 100 Research Drive Worcester, MA 01605 (508) 688-8053

APPLICANT FACSMILE OF FORM PTO-1449			Sheet 1 of 6
REV7-50	U.S. DÉPARTMENT OF COMMERCE	ATTY DOCKET NO	SERIAL NO.
1277-00	PATENT AND TRADEMARK OFFICE	BBI-6077CP	09/777.554
LIST OF PUBLICATIONS CIT	ED BY APPLICANT	APPLICANT	
(Use several sheets i		Cusack, K. P. et al.	
,	,,	FILING DATE	GROUP
		February 8, 2001	

U.S. PATENT DOCUMENTS

EXAMBIÉQ (A)TIAL		DOCUMENT NUMBER	DATE	, , NAME	CLASS	SUBCLASS	FILING DATE
	A1	4,966,849	10/90	Vallee et al.	435	199	IF APPROPRIATE
	A2	5,217,999	06/93	Levitzki et al.	514	613	
	A3	5,302,606	04/94	Spada et al.	514	357	
	A4	5,330,992	07/94	Eissenstat et al.	514	312	

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	BUBCLASS	TRANS	LATION
A5	WO 91/15495 A1	10/91	PCT			Yés	МО
A6	WO 92/20642 A1						
 A7	<u> </u>	11/92	PCT				
 	WO 92/21660 A1	12/92	PCT				
A8	WO 94/03427 A1	02/94	PCT			Ì	1
A9	WO 94/10202 A1	05/94	PCT			†	† ~
A10	WO 94/14808 A1	07/94	PCT				╁──
A11	EP 566 226 B1	11/95	EPO				╁
A12	WO 97/22596 A1	06/97	PCT			<u> </u>	\vdash
A13	WO 97/34876 A1	09/97	PCT	- -	_		╆
A14	WO97/40830 A1	11/97	PCT		_		╁
A15	WO 97/40831 A1	11/97	PCT				-
A16	WO 97/42187 A1	11/97	PCT				
A17	WO 98/07832 A1	02/98	PCT				┼

A18	Expert Opin. Ther. Pat. 8(4): 475-478 (1998)
A19	Achen et al, "Vascular endothelial growth factor D (VEGF-D) is a ligand for the tyrosine kinases VEGF receptor 2 (Flk1) and VEGF receptor 3 (Flt4)," PNAS USA 95(2): 548-553 (1998)
A20	Aplin et al., "In vitro phosphorylation of the cytoplasmic domain of the amyloid precursor protein by glycogen synthase kinase-3beta," Journal of Neurochemistry, 67:699-707 (1996)
A21	Armstrong, "Treatment of opportunistic fungal infections," Clinical Infectious Diseases, 16:1-7- (1993)
A22	Badger et al., "Pharmacological profile of SB 203580, a selective inhibitor of cytokine suppressive binding protein/p38 kinase, in animal models of arthritis, bone resorption, endotoxin shock and immune function," The Journal of Pharmacology and Experimental Therapeutics, 279:1453-1461 (1996)
Examiner	Date Considered
'EXAMINER:	Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applican

i	APPLICANT FACSIMILE OF FORM PTO-1449	U.A. DEPARTMENT OF		Should of 6
1		COMMERCE	ATTY DOCKET NO	BERIAL NO.
Ì	REV 1-80	PATENT AND TRADEMARK OFFICE	BBI-6077CP	09/777,554
	LIST OF PUBLICATIONS CITED		APPLICANT	
	(Use several sheets if no	ecessary)	Cusack, K. P. et al.	
1	Í		FILING DATE	GROUP
			February 8, 2001	ł

l 81 [OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)
	Baeuerle et al., "Function and activation of NF-kappa B in the immune system," Annual Review of Immunology, 12:141-179 (1994)
B2	Beg et al., "An essential role for NF-kappaB in preventing TNF-alpha-induced cell death," Science, 274:782-784 (1996)
B3	Bolen, "Nonreceptor tyrosine protein kinases," Oncogene 8:2025-2031 (1993)
B4	Borthwick et al., "Inhibition of glycogen synthase kinase-3 by insulin in cultured human skeletal muscle myoblasts," Biochemical & Biophysical Research Communications, 210:738-745 (1995)
B5	Brickell, "The p60c-src family of protein-tyrosine kinases: structure, regulation, and function," Critical Reviews in Oncogenesis, 3:401-406 (1992)
B6	Brown et al., Regulation of Angiogenesis (ed. L.D. Goldberg and E.M. Rosen), 233-269 (1997)
B7	Buchdunger et al., "Selective inhibition of the platelet-derived growth factor signal transduction pathway by a protein-tyrosine kinase inhibitor of the 2-phenylaminopyrimidine class," PNAS USA 92:2258-2262 (1995)
86	Courtneidge, "Protein tyrosine kinases, with emphasis on the Src family," Seminars in Cancer Biology, 5:236-246 (1994)
B9	Cowburn, "Peptide recognition by PTB and PDZ domains," Curr. Opin. Struct. Biol, 7(6):835-838 (1997)
B10	De Vries et al. "The fms-like tyrosine kinase, a receptor for vascular endothelial growth factor," Science 255:989-991 (1992)
B11	Draetta, "Cdc2 activation: The interplay of cyclin binding and Thr161 phosphorylation," <i>Trends in Cell Biology</i> , 3:287-289 (1993)
B12	Ducommun et al., "cdc2 phosphorylation is required for its interaction with cyclin," EMBO Journal 10:3311-3319 (1991)
B13	Fantt et al., "Distinct phosphotyrosines on a growth factor receptor bind to specific molecules that mediate different signaling pathways," Cell 69:413-423 (1992)
B14	Ferrara et al. "The vascular endothelial growth factor family of polypeptides," J. Cell. Biochem. 47:211-218 (1991)
B15	Ferrara et al., "Vascular endothelial growth factor. Basic biology and clinical implications," in Regulation of Angiogenesis (ed. L. D. Goldberg and E.M. Rosen), 209-232 (1997)
B16	Ferrara et al., "The biology of vascular endothelial growth factor," Endocrine Reviews 18(1): 4-25 (1997)
B17	Gautier et al., "Dephosphorylation and activation of Xenopus p34cdc2 protein kinase during the cell cycle," Nature 339:626-629 (1989)
B18	Gilbert, "Horizontal integration and cortical dynamics," Neuron 9:1-13 (1992)
B19	Girard et al., "Cyclin A is required for the onset of DNA replication in mammalian fibroblasts," Cel. 67:1169-1179 (1991)
xaminer	Date Considered

LONG CO. CO.			Sheet 3 of 6	
APPLICANT FACSWILE OF FORM PTO-1448	U.S. DEPARTMENT OF COMMERCE	ATTY DOCKET NO	SERIAL NO.	
REV 7-80	PATENT AND TRACEMARK OFFICE	BBI-6077CP	09/777.554	
LIST OF PUBLICATIONS CITE	ED BY APPLICANT	APPUCANT		
(Use several sheets if	necessary)	Cusack, K. P. et al.		
	•	FILING DATE	GROUP	
	·	February 8, 2001		

1 - 1	OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)
C1	Gould et al., "Tyrosine phosphorylation of the fission yeast cdc2+ protein kinase regulates entry into mitosis," Nature, 342:39-45 (1989)
C2	He et al., "The human cytomegalovirus UL97 protein is a protein kinase that autophosphorylates on serines and threonines," Journal of Virology, 71:405-411 (1997)
C3	Hosoi et al., "Evidence for cdk5 as a major activity phosphorylating tau protein in porcine brain extract," Journal of Biochemistry (Tokyo), 117:741-749 (1995)
C4	Hunter et al., "Cyclins and cancer, II: Cyclin D and CDK inhibitors come of age," Cell, 79:573-58 (1994)
C5	Jakeman et al., "Developmental expression of binding sites and messenger ribonucleic acid for vascular endothelial growth factor suggests a role for this protein in vasculogenesis and angiogenesis," <i>Endocrinology</i> 133: 848-859 (1993)
Č6	Jellinek, et al., "Inhibition of receptor binding by high-affinity RNA ligands to vascular endothelial growth factor," Biochemistry 33:10450-56 (1994)
C7	Kendall et al., "Inhibition of vascular endothelial cell growth factor activity by an endogenously encoded soluble receptor," Proc. Natl. Acad. Sci 90:10705-09 (1994)
C8	Kim et al., "Inhibition of vascular endothelial growth factor-induced angiogenesis suppresses tumour growth in vivo," Nature 362:841-844 (1993)
C9	Kinsella, et al. "Protein kinase C regulates endothelial cell tube formation on basement membrane matrix, Matrigel," Exp. Cell Res. 199:56-62 (1992)
C10	Klagsburn et al., "Vascular endothelial growth factor and its receptors," Cytokine & Growth Factor Reviews 7: 259-270 (1996)
C11	Koch et al., "SH2 and SH3 domains: elements that control interactions of cytoplasmic signaling proteins," Science 252:668-678 (1991)
C12	Kohn et al., "Cell cycle control and cancer chemotherapy," Journal of Cellular Biochemistry, 54:440-452 (1994)
C13	Kolch et al., "Regulation of the expression of the VEGF/VPS and its receptors: role in tumor angiogenesis," Breast Cancer Research and Treatment 36: 139-155 (1995)
C14	Korpelainen et al., "Signaling angiogenesis and lymphangiogenesis," Curr. Opin. Cell Biol., 10:159-164 (1998)
C15	Krek et al., 'Mutations of p34cdc2 phosphorylation sites induce premature mitotic events in HeLa cells: evidence for a double block to p34cdc2 kinase activation in vertebrates," <i>EMBO Journal</i> , 10:3331-3341 (1991)
C16	Lees, "Cyclin dependent kinase regulation," Current Opinion in Cell Biology, 7:773-780 (1995)
C17	Lymboussaki et al, "Expression of the vascular endothelial growth factor C receptor VEGFR-3 in lymphatic endothelium of the skin and in vascular turnors," Am. J. Pathol. 153(2): 395-403 (1998)
C18	Maglione et al. "Two alternative mRNAs coding for the angiogenic factor, placenta growth factor (PIGF), are transcribed from a single gene of chromosome 14," Oncogene 8:925-31 (1993)
C19	Mariani, et al., "inhibition of angiogenesis by FCE 26806, a potent tyrosine kinase inhibitor," Proc Am. Assoc. Cancer Res. 35:2268 (1994)
C20	Matsushime et al., "D-type cyclin-dependent kinase activity in mammalian cells," Molecular & Cellular Biology, 14:2066-2076 (1994)
aminer	Date Considered

١	- AA			3ncer = 31 B
	APPLICANT FACSIMILE OF FORM PTO-1449	U.S. DEPARTMENT OF	ATTY DOCKET NO	SERIAL NO.
	R∈V 7-90	COMMERCE PATENT AND YRADEMARK OFFICE	BBI-6077CP	09/777,554
	LIST OF PUBLICATIONS CITE	D BY APPLICANT	APPLICANT	
	(Use several sheets if n	ecessary)	Cuşack, K. P. et al.	
			FILING DATE	GROUP
		· · · · · · · · · · · · · · · · · · ·	February 6, 2001	

	OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)
D1	Matthews et al., "A receptor tyrosine kinase cDNA isolated from a population of enriched primitive hematopoietic cells and exhibiting close genetic linkage to c-kit," PNAS USA, 88:9026-30 (1991)
D2	Meyer et al, "A novel vascular endothelial growth factor encoded by Orf virus, VEGF-E, mediates angiogenesis via signalling through VEGFR-2 (KDR) but not VEGFR-1 (Fit-1) receptor tyrosine kinases," EMBO J. 18(2):363-374 (1999)
D3	Migdal et al, "Neuropilin-1 is a placenta growth factor-2 receptor," J. Biol. Chem. 273 (35): 22272-22278 (1998)
D4	Millauer et al., "High affinity VEGF binding and developmental expression suggest Flk-1 as a major regulator of vasculogenesis and angiogenesis," Cell 72:835-846 (1993)
D5	Murray et al., "Cyclin synthesis drives the early embryonic cell cycle," Nature, 339:275-280 (1989)
D6	Mustonen et al., "Endothelial receptor tyrosine kinases involved in angiogenesis," J. Cell Biol. 129:895-898 (1995)
D7	Myers et al., "The preparation and sar of 4-(anilino), 4-(phenoxy), and 4-(thiophenoxy)-quinazolines; inhibitors of p56 ^{kx} and EGF-R tyrosine kinase activity," <i>Bioorg. Med. Chem. Lett.</i> 7:417-420 (1997)
D8	Myers et al., "The synthesis and sar of new 4-(N-alkyl-N-phenyl)amino-6,7-dimethoxyquinazolines and 4-(N-alkyl-N-phenyl)amino-pyrazolo[3,4-d]pyrimidines, inhibitors of CSF-1R tyrosine kinase activity." Bioorganic & Medicinal Chemistry Letters, 7:421-424 (1997)
D9	Oelrichs et al, "NYK/FLK-1: a putative receptor protein tyrosine kinase isolated from E10 embryonic neuroepithelium is expressed in endothelial cells of the developing embryo," Oncogene 8(1):11-15 (1993)
D10	Ogawa et al, "A novel type of vascular endothelial growth factor, VEGF-E (NZ-7 VEGF), preferentially utilizes KDR/Flk-1 receptor and carries a potent mitotic activity without heparin-bindir g domain," J. Biol. Chem. 273(47): 31273-31282 (1998)
D11	Ohtsubo et al., "Cyclin-dependent regulation of G1 in mammalian fibroblasts." Science, 259:1908 1912 (1993)
D12	Osmani et al., "Parallel activation of the NIMA and p34cdc2 cell cycle-regulated protein kinases is required to initiate mitosis in A. nidulans," Cell, 67:283-291 (1991)
D13	Osmani et al., "Activation of the nimA protein kinase plays a unique role during mitosis that cannot be bypassed by absence of the bimE checkpoint," EMBO Journal, 10:2669-2679 (1991)
D14	Pagano et al., "Cyclin A is required at two points in the human cell cycle," EMBO Journal, 11:961-971 (1992)
D15	Park et al., "Placenta growth factor. Potentiation of vascular endothelial growth factor bioactivity, in vitro and in vivo, and high affinity binding to Fit-1 but not to Fik-1/KDR." J. Biol. Chem. 269:25646-54 (1994)
D16	Perkins et al., "Regulation of NF-kappaB by cyclin-dependent kinases associated with the p300 coactivator," Science, 275:523-527 (1997)
Examiner	Date Considered

1				211661 2 01 6	
	APPLICANT FACSIME OF FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE	ATTY DOCKET NO	SERIAL NO	
	REV 7-80	PATENT AND TRADEMARK OFFICE	BBI-6077CP	09/777,554	
	LIST OF PUBLICATIONS CITE	D BY APPLICANT	APPLICANT		
	(Use several sheets if n		Cusack, K. P. et al.		
		•	FRING DATE	GROUP	
			February 8, 2001		

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)		
Pines, "Cell proliferation and control," Current Opinion in Cell Biology, 4:144-148 (1992)		
Pines, "Cyclins and cyclin-dependent kinases: take your partners," <i>Trends in Biochemical Sciences</i> , 18:195-197 (1993)		
Powis, "Signalling pathways as targets for anticancer drug development," Pharmacology & Therapeutics, 62:57-95 (1994)		
Quelle et al., "Overexpression of mouse D-type cyclins accelerates G1 phase in rodent fibroblasts," Genes & Development, 7:1559-1571 (1993)		
Resnitzky et al., "Acceleration of the G1/S phase transition by expression of cyclins D1 and E with an inducible system," Molecular & Cellular Biology, 14:1669-1679 (1994)		
Ristimaki et al, "Proinflammatory cytokines regulate expression of the lymphatic endothelial mitogen vascular endothelial growth factor-C," J. Biol. Chem. 273(14):8413-8418 (1998)		
Rosenblatt et al., "Human cyclin-dependent kinase 2 is activated during the S and G2 phases of the cell cycle and associates with cyclin A," Proc. Nat Acad. Sc. USA, 89:2824-2828 (1992)		
Schlessinger et al., "Growth factor signaling by receptor tyrosine kinases," Neuron 9:383-391 (1992)		
Shawver et al., "Receptor tyrosine kinases as targets for inhibition of angiogenesis," Drug Discovery Today, 2:50-63 (1997)		
Sherr, "Mammalian G1 cyclins," Cell, 73:1059-1065 (1993)		
Shibuya et al., "Nucleotide sequence and expression of a novel human receptor-type tyrosine kinase gene (fit) closely related to the fms family." Oncogene 5:519-524 (1990)		
Shoelson, "SH2 and PTB domain interactions in tyrosine kinase signal transduction," Curr. Opin. Chem. Biol. 1(2): 227-234 (1997)		
Solomon et al., "Cyclin activation of p34cdc2," Cell, 63:1013-1024 (1990)		
Solomon et al., "Role of phosphorylation in p34cdc2 activation: identification of an activating kinase," Molecular Biology of the Cell, 3:13-27 (1992)		
Songyang et al., "SH2 domains recognize specific phosphopeptide sequences," Cell 72:767-778 (1993)		
Songyang et al., "Specific motifs recognized by the SH2 domains of Csk, 3BP2, fps/fes, GRB-2, HCP, SHC, Syk, and Vav," Mol. Cell. Biol. 14:2777-2785 (1994)		
Staunton et al., "The arrangement of the immunoglobulin-like domains of ICAM-1 and the binding sites for LFA-1 and Rhinovirus," Cell 61:243-254 (1990)		
Stone et al., "Reversible, p16-mediated cell cycle arrest as protection from chemotherapy." Cancer Research, 56;3199-3202 (1996)		
Takano, et al., "Inhibition of angiogenesis by a novel diaminoanthraquinone that inhibits protein kinase," Mol. Bio. Cell 4:358A (1993)		
Tanaka et al., *c-CBL is downstream of c-Src in a signalling pathway necessary for bone resorption,* Nature, 383:528-531 (1996)		
Date Considered		

			Direct d OLO
APPLICANT FACSIMILE OF FORM PTQ-1449	U.S. DEPARTMENT OF COMMERCE	ATTY DOCKET NO	SERIAL NO
REV 7-86	PATENT AND TRADEMARK OFFICE	BBI-6077CP	09/777,554
LIST OF PUBLICATIONS CITED BY APPLICANT		APPLICANT	
(Use several sheets if necessary)		Cusack, K. P. et al.	
		FILING DATE	GROUP
		February 8, 2001	

	Officialing Addior, Title, Date, Perchent Pages, Etc.)		
F1	Terman et al., "Identification of a new endothelial cell growth factor receptor tyrosine kinase," Oncogene 6:1677-83 (1991)		
F2	Terman et al., "Identification of the KDR tyrosine kinase as a receptor for vascular endothelial cell growth factor," Biochem. Biophys. Res. Comm. 187:1579-86 (1992)		
F3	Ullrich et al., "Signal transduction by receptors with tyrosine kinase activity," Cell 61:203-212 (1990)		
F4	Van Antwerp et al., "Suppression of TNF-alpha-induced apoptosis by NF-kappaB," Science, 274:787-789 (1996)		
F5	Vousden, "Interactions of human papillomavirus transforming proteins with the products of tumor suppressor genes," FASEB Journal, 7:872-879 (1993)		
F6	Walker et al., "Role for cyclin A in the dependence of mitosis on completion of DNA replication," Nature, 354:314-317 (1991)		
F7	Wang et al., "TNF- and cancer therapy-induced apoptosis: potentiation by inhibition of NF-kappaB," Science, 274:784-787 (1996)		
F8	Williams, "Factors regulating the expression of vascular permeability/vascular endothelial growth factor by human vascular tissues," Diabetelogia 40: S118-120 (1997)		
F9	Witzenbichler et al, "Vascular endothelial growth factor-C (VEGF-C/VEGF-2) promotes angiogenesis in the setting of tissue ischemia," Am. J. Pathol. 153(2):381-394 (1998)		
F10	Wright, et al., "Inhibition of angiogenesis in vitro and in ovo with an inhibitor of cellular protein kinases, MDL 27032," J. Cellular Phys. 152:448-57 (1992)		
F11	Yarden et al., "Growth factor receptor tyrosine kinases," Ann. Rev. Biochem. 57:443-478 (1988)		
F12	Zindy et al., "Cyclin A is required in S phase in normal Pepithelial cells," Biochemical & Biophysical Research Communications, 182:1144-1154 (1992)		
F13	Olofsson et al., "Vascular endothelial growth factor B (VEGF-B) binds to VEGF receptor-1 and regulates plasminogen activator activity in endothelial cells," PNAS USA 95:11709-11714 (1998)		
_			
<u> </u>			
	Date Considered		
Examiner			